



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,978	12/05/2001	Philippe Dueme	216793US2	1348
22850	7590	09/25/2006		
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PASCAL, LESLIE C	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/001,978

Applicant(s)

DUEME ET AL.

Examiner

Leslie Pascal

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12 is/are rejected.
- 7) ☐ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12-5-01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Claims 10 and 11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on other multiply dependent claims. See MPEP § 608.01(n). Accordingly, the claims 10-11 not been further treated on the merits.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-9 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the specification, the upstream means is disclosed as element 16, the downstream means is randomly disclosed as 1) element 18 and a distributed amplifier or 2) the laser. The claimed "device" is an offset diode between the upstream and downstream circuits. This is confusing because the offset device is part of the upstream device as is the distributed amplifier and element 18. The connections of the claimed device are unclear to the point that it is unclear what the applicant feels is his invention. How is the offset device between the distributed amplifier and element 16 (the upstream device)? "A few dozen mA" of claim 9 is not disclosed.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-9 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout the specification, the upstream circuit is referred to as element 16. Since the offset diode is part of element 16, this appears to be misdescriptive (since the offset diode is between the upstream and downstream). It is unclear what part of the "upstream circuit" has impedance of 50 ohms or why. It is unclear how the downstream circuit which includes the distribute amplifier is at the other side of the upstream circuit. Further, the applicant claims that the transistors of the offset diode comprise drain and source connected to each other the gate finger of each transistor forming a contact with diode effect. It is unclear what is meant by this. It would appear that the applicant feels that this is well known enough not to show or teach how it is done, or else it would be new matter.

6. Claims 5/4/1 and 5/4/2 and 8/7/4/1 or 8/7/4/2 (showing dependency 5/4/1 means claim5 dependent on 4 dependent of 1-in which no laser has previously been mentioned) recites the limitation "the laser diode" in lines 2-3 of claim 5 and line6 of claim 8. There is insufficient antecedent basis for this limitation in the claim.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transistors, which make up the diode of claims 2-3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 2613

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soares et al (5162754).

Soares et al teach a microwave monolithic interface (either N or PD) used between an upstream (N-1) and a downstream (N+1) circuit. In that he is amplifying the signal, it is offset. In that he uses transistors, which he says must have dc bias, it would appear obvious, if not inherent that the upstream and downstream circuits have such bias voltages. With regard to the offset circuit, he teaches that the diodes provide the offset (column 2, last paragraph). In regard to the bias current of the downstream circuit being high in relation to the threshold current of the offset diode, see column 4, lines 4-

6. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soares et al as applied to claim 1 above, and further in view of Barnes et al (6466083). Although Soares et al do not teach specifics about his offset diode, Barnes et al teach that it is well known to use transistors to make up a diode offset circuit. It would have been obvious to use transistor as the offset diodes of Soares et al in order to easily integrate the circuits. In regard to claim 3, the applicant has not shown what is meant by this connection, nor explained why the connection is critical. It would appear that

Art Unit: 2613

connecting the devices as claimed is well known since the applicant did not show how to connect them as such. See the above 112 rejection.

10. Claims 4/ 1 and 5-8/1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soares as applied to claim 1 above, and further in view of the prior art figure.

11. Claims 4/ 2-3 and 5-8/2-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soares in view of Barnes and the 112 problems as applied to claims 2-3 above, and further in view of the prior art figure.

Based on the problems with the connections of the means as disclosed and claimed, it would appear that it would have been obvious to replace the coupling capacitor of figure 2 with a circuit of Soares in order to provide a wideband amplifier device for providing a strong enough signal to the laser.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday, Friday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leslie Pascal  
Primary Examiner  
Art Unit 2613